

### **REMARKS**

In response to the Office action mailed November 5, 2009, and in connection with the Request for Continued Examination (RCE) filed with this amendment, the Assignee requests entry of the claim amendments indicated above and reconsideration.

Claims 1-16 were pending, of which claims 1, 4, 7, 10 and 13 are now amended. No claims are added or cancelled. Thus, claims 1-16 remain pending, with claims 1, 7, and 13 being independent. No new matter has been added.

#### **I. Rejections Under 35 U.S.C. § 103**

Claims 1-4 and 7-10 stand rejected under 35 U.S.C. § 103(a) as purportedly being unpatentable over U.S. Patent No. 7,117,153 ("Mahajan") in view of U.S. Patent Application Publication No. 2002/0188451 ("Guerra"), in view of U.S. Patent Application Publication No. 2002/0049593 ("Shao"), and further in view of U.S. Patent No. 7,139,706 ("Yuschik"). Claims 5, 6, and 11-16 stand rejected under 35 U.S.C. § 103(a) as purportedly being unpatentable over Mahajan in view of Guerra, Shao and Yuschik, and further in view of U.S. Patent No. 6,275,797 ("Randic"). Reconsideration is requested in view of the claim amendments indicated above and the following remarks.

##### **A. Independent Claims 1 and 7**

Each of independent claims 1 and 7 would not have been obvious to one of skill in the art in view of the proposed combination of Mahajan, Guerra, Shao, and Yuschik for at least three reasons. First, one of skill in the art would have had no reason to make the proposed combination. Secondly, the Office Action fails to establish a prima facie case of obviousness in that it does not explain what the purported result of the proposed combination would have been. Thirdly, the proposed combination would not have met all of the limitations of claim 1 or claim 7, as amended.

##### **(i) No Reason to Combine Yuschik with Mahajan, Guerra, and Shao**

One of skill in the art would have had no reason to combine Yuschik with Mahajan, Guerra, and Shao in the manner proposed in the Office Action in setting forth the rejections of independent

claims 1 and 7 (see pp. 3-5 and 9-11 of Office Action). In rejecting claims 1 and 7, the Office Action contends that Mahajan discloses generating a test input for a current grammar by providing a portion of training data 304 to a speech recognition system (see p. 4, ll. 1-3 of Office Action). The Office appears to contend that the word being tested, namely a word of the training data, is the current grammar (see p. 4, ll. 14-15 of Office Action). The Office Action concedes that the combination of Mahajan, Guerra, and Shao does not specifically teach determining whether to modify the current grammar (i.e., the word being tested in the Office's combination) (see p. 5, ll. 11-12 of Office Action), yet asserts that Yuschik teaches determining whether to modify a current grammar, and therefore that it would have been obvious to one of skill in the art at the time of the invention to use the grammar modification as taught by Yuschik with the system of Mahajan and Guerra and Shao (see p. 5, ll. 13-22 of Office Action). The Assignee respectfully disagrees.

As the Office correctly notes, Mahajan provides training data to a voice recognition system for the purpose of testing the recognition models of the voice recognition system (see p. 4, ll. 1-3 of Office Action). The purpose is not to test the training data itself. Rather, the training data is known, which allows the determination of whether the voice recognition system accurately recognizes it. Thus, there would have been no reason to modify the training data of Mahajan, which is what the Office appears to contend meets the limitation of the "current grammar" of claim 1.

Thus, one of skill in the art would not have had any reason to make the proposed combination and therefore would not have found claims 1 and 7 obvious in view of the proposed combination of Mahajan, Guerra, Shao and Yuschik.

*(ii) The Office Action Fails to Establish a Prima Facie Case of Obviousness*

In addition to there being no reason why one of skill in the art would have made the proposed combination of Mahajan, Guerra, Shao, and Yuschik, it is respectfully noted that the Office Action fails to establish a prima facie case of obviousness with respect to the rejections of claims 1 and 7 because there is no explanation as to what the resulting combination would have been. The Office Action asserts that one of skill in the art would have found it obvious to use "the grammar modification as taught by Yuschik with the system of Mahajan and Guerra and Shao in order to facilitate the desired recognition grammar updating contemplated in Yuschik 0100-0108"

(see pgs. 5 and 11 of Office Action). However, the Office Action provides no explanation of how the purported grammar modification of Yuschik would be implemented in the system of Mahajan, Guerra, and Shao, and therefore what the resulting system purportedly would have been.

Thus, as the Office Action does not explain what the purported resulting system would have been, no prima facie case of obviousness has been established. It is respectfully requested that if the Examiner is to maintain this rejection, an explanation be provided of how the purported grammar modification of Yuschik would have been implemented in the combination, and therefore what the resulting system would have been.

*(iii) The Proposed Combination Would Not Have Met All of the Limitations of Claim 1*

The proposed combination of Mahajan, Guerra, Shao, and Yuschik would not have met all of the limitations of claim 1, as amended. Claim 1 now recites:

A method of evaluating grammars associated with a voice portal on a portal server, said method comprising:  
generating, for ***a current grammar of the voice portal representing a valid input for a first menu of the voice portal***, a test input, the test input for the current grammar including a test pattern;  
providing the test input to the voice portal on the portal server using a voice server;  
receiving at least one measure of how distinguishable the current grammar is from other grammars of a set of active grammars that are active when the current grammar is active, ***the set of active grammars including the current grammar and at least one grammar from a second menu of the voice portal***, the at least one measure based at least in part on analysis of the test pattern with respect to the set of active grammars; and  
determining whether to modify the current grammar based at least in part on the at least one measure. (Emphasis added)

The proposed combination would have failed to result in a method meeting at least the above-highlighted limitations. There is no discussion in the combination of references of determining how distinguishable grammars of different menus of a voice portal are. Thus, it should be appreciated that the above-highlighted limitations would not have been met by the proposed combination.

Support for the amendments to claim 1 may be found in the application as filed, such that no new matter has been added. For example, support may be found at least in paragraphs [0021], [0023], and [0024].

*(iii) The Proposed Combination Would Not Have Met All of the Limitations of Claim 7*

The proposed combination of Mahajan, Guerra, Shao, and Yuschik would not have met all of the limitations of independent claim 7, as amended. Claim 7 now recites:

A computer-readable storage medium encoded with instructions which, when executed by a computer, cause the computer to perform a method of evaluating grammars associated with a voice portal, the method comprising:

generating, for *a current grammar of the voice portal representing a valid input for a first menu of the voice portal*, a test input, the test input for the current grammar including a test pattern; providing the test input to the voice portal; receiving at least one measure of how distinguishable the current grammar is from other grammars of a set of active grammars that are active when the current grammar is active, *the set of active grammars including the current grammar and at least one grammar from a second menu of the voice portal*, the at least one measure based at least in part on analysis of the test pattern with respect to the set of active grammars; and determining whether to modify the current grammar based at least in part on the at least one measure. (emphasis added).

The proposed combination would have failed to result in a computer-readable storage medium meeting at least the above-highlighted limitations. There is no discussion in the combination of references of determining how distinguishable grammars of different menus of a voice portal are. Thus, it should be appreciated that the above-highlighted limitations would not have been met by the proposed combination.

Support for the amendments to claim 7 may be found in the application as originally filed, such that no new matter has been added. For example, support for the amendments to claim 7 may be found in at least the same parts of the application cited above as providing support for the amendments to claim 1.

For at least the reasons discussed above, withdrawal of the rejections of claims 1 and 7 is respectfully requested, as is withdrawal of the rejections of their dependent claims (claims 2-6 for claim 1 and claims 8-12 for claim 7), since these depend from claims 1 or 7 and are patentable for at least the same reasons.

C. Independent Claim 13

Claim 13 would not have been obvious to one of skill in the art in view of the proposed combination of Mahajan, Guerra, Shao, Yuschik and Randic, because the proposed combination fails to meet each and every limitation of the claim. As amended, claim 13 recites:

A system for evaluating grammars of a voice portal executing on a portal server, the system comprising:  
an analysis interface for extracting a current grammar from a set of active grammars of the voice portal, ***the current grammar representing a valid input for a first menu of the voice portal and being one grammar of the set of active grammars, the set of active grammars including at least one grammar from a second menu of the voice portal;***  
a test pattern generator for generating a test input for the current grammar, the test input including a test pattern;  
a text-to-speech engine on a computer for entering the test input into the voice portal;  
a results collector for analyzing the test input entered into the voice portal against the set of active grammars; and  
a results analyzer for deriving a set of statistics indicative of how distinguishable the current grammar is from other grammars of the set of active grammars. (Emphasis added)

The proposed combination would have failed to meet at least the above-highlighted limitation of claim 13. The Office Action contends that Mahajan or Yuschik discloses an analysis interface as recited in previously pending claim 13. Without conceding the appropriateness of this contention, claim 13 has been amended as indicated above. None of the references disclose a set of active grammars including a current grammar representing a valid input for a first menu and at least one grammar from a second menu of the voice portal. Thus, it should be appreciated that the above-highlighted limitation would not have been met.

Thus, withdrawal of the rejection of claim 13 is respectfully requested, as is withdrawal of the rejections of claims 14-16, since these depend from claim 13 and are patentable for at least the same reasons.

Support for the amendments to claim 13 may be found in the application as originally filed, such that no new matter has been added. For example, support may be found at least in those portions of the application cited above as providing support for the amendments to claim 1.

## **II. Additional Comments on Dependent Claims**

Since each of the dependent claims depends from a base claim that is believed to be in condition for allowance, the Assignee believes it is unnecessary at this time to argue the allowability of each of the dependent claims individually. The Assignee does not, however, necessarily concur with the interpretation of any dependent claim as set forth in the Office Action, nor does the Assignee concur that the basis for the rejection of any dependent claim is proper. Therefore, the Assignee reserves the right to specifically address the patentability of the dependent claims in the future, if necessary.

**CONCLUSION**

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, the Assignee hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, the Director is hereby authorized to charge any deficiency or credit any overpayment in the fees filed, asserted to be filed or which should have been filed herewith to our Deposit Account No. 23/2825, under Docket No. N0484.70571US00.

Dated: 2/ 4 /2010

Respectfully submitted,

By Thomas A. Franklin  
Thomas A. Franklin  
Registration No.: 63,456  
WOLF, GREENFIELD & SACKS, P.C.  
Federal Reserve Plaza  
600 Atlantic Avenue  
Boston, Massachusetts 02210-2206  
617.646.8000